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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------------|---------------------|------------------|
| 10/530,222 | 07/31/2006 | Jose Luis Miranda Valencia | MR3269-57 | 5566 |
| <div>7590 Rosenberg Klein & Lee 3458 Ellicott Center Drive Suite 101 Ellicott City, MD 21043</div> | | | | |
| <div>EXAMINER PRYOR, ALTON NATHANIEL</div> | | | | |
| <div>ART UNIT 1616</div> | | | | |
| <div>PAPER NUMBER</div> | | | | |
| <div>MAIL DATE 06/18/2010</div> | | | | |
| <div>DELIVERY MODE PAPER</div> | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/530,222

Applicant(s)

VALENCIA ET AL.

Examiner

ALTON N. PRYOR

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bardsely (US 4219349; 8/26/80) and Young (US 4334906; 6/15/82). Bardsely teach a plant nutrient composition comprising calcined clay(montmorillinite) granules with micronutrients and 1.0 to 5 % sulfur attached thereto (column 2 lines 8-40). The micronutrients attached to granules are 0.1 to 5% iron (ferrous chloride), 0.02 to 2.0 % zinc (zinc sulfate), 0.05 to 1.0 % manganese (manganese sulfate), 0.05 to 0.5 copper (copper sulfate), 0.0005 to 0.0010 % molybdenum (ammonium molybdenum). See column 3 lines 2 – 16. Bardsely does not the granule comprising calcium oxide and iron sulfate and the hydrate forms of the salts. Bardsely does not teach the granule having 1) a 100% solubility at 25 degree C in 30 minutes, 2) a pH of 3.5 to 5, 3) a moisture content of 2 to 6% and 4) a hardness of 1.9 to 2.3 Kg/cm². Bardsely does not teach the instant method of preparing the pellet. However, Young suggest that both calcium oxide and iron sulfate serve as plant nutrient (abstract, column 9 line 27 – column 10 line 11). Young also teaches a pH of below 7 for the plant nutrient composition such a pH range contributes to the availability of the micronutrients therein the composition (column 10 lines 19-48). Thus, it would have been obvious to modify the invention taught by

Bardsely to include the calcium oxide and iron sulfate taught by Young. Also based on Young's teaching would have been obvious to an artisan to make the granule having a pH below 7. An artisan would have been motivated to do this in order for micronutrients enclosed in the granules to be available. One would have been motivated to do this in order to provide more plant nutrient value to Bardsely's plant nutrient pellet or granule. The combination of Bardsely and Young results in a granule having the same chemical ingredients as does the instant granule. Therefore, Bardsely's and Young's granule would automatically have the same a similar solubility, moisture content and hardness properties as the claimed granule. With respect to preparing the granule, the steps of mixing, pelletizing and drying ingredients in the presence of a binder to make a tablet, granule or pellet is common to the art (WO 9428699; 12/22/94). Thus, the instant claims present no unobvious steps in the process of making a pellet or granule.

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALTON N. PRYOR whose telephone number is (571)272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alton N. Pryor/
Primary Examiner, Art Unit 1616